07/08/200316:25Print selected from Online session

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FILE COVERS 1907 - 7 Aug 2003 VOL 139 ISS 6
FILE LAST UPDATED: 6 Aug 2003 (20030806/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> macrocyclic
         18359 MACROCYCLIC
            84 MACROCYCLICS
L11      18390 MACROCYCLIC
                 (MACROCYCLIC OR MACROCYCLICS)

=> serine()protease()inhibitor
         90472 SERINE
          1452 SERINES
         91032 SERINE
                 (SERINE OR SERINES)
         76425 PROTEASE
         28810 PROTEASES
         89502 PROTEASE
                 (PROTEASE OR PROTEASES)
        418585 INHIBITOR
        441774 INHIBITORS
        679145 INHIBITOR
                 (INHIBITOR OR INHIBITORS)
L12       2794 SERINE(W)PROTEASE(W)INHIBITOR

=> hepatitis()C()virus
         39020 HEPATITIS
       3061941 C
        285727 VIRUS
         61717 VIRUSES
        296084 VIRUS
                 (VIRUS OR VIRUSES)
L13       8183 HEPATITIS(W)C(W)VIRUS

=> l1 and l2 and l3
         18359 MACROCYCLIC
            84 MACROCYCLICS
         18390 MACROCYCLIC
```

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                (MACROCYCLIC OR MACROCYCLICS)
             0 COUMPONDS
             0 MACROCYCLIC(W)COUMPONDS
         18359 MACROCYCLIC
            84 MACROCYCLICS
         18390 MACROCYCLIC
                (MACROCYCLIC OR MACROCYCLICS)
        753760 COMPOUNDS
       1500776 COMPDS
       1895912 COMPOUNDS
                (COMPOUNDS OR COMPDS)
          5256 MACROCYCLIC(W)COMPOUNDS
        718326 13
L14          0 L1 AND L2 AND 13

=> 12 and 13
         18359 MACROCYCLIC
            84 MACROCYCLICS
         18390 MACROCYCLIC
                (MACROCYCLIC OR MACROCYCLICS)
        753760 COMPOUNDS
       1500776 COMPDS
       1895912 COMPOUNDS
                (COMPOUNDS OR COMPDS)
          5256 MACROCYCLIC(W)COMPOUNDS
             2 HEPETITIS
       3061941 C
             1 HEPETITIS(W)C
L15          0 L2 AND L3

=> l11 and l12 and l13
L16          2 L11 AND L12 AND L13

=> d all 1-2

L16  ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2003 ACS on STN
AN   2001:798207  CAPLUS
DN   135:344735
TI   Preparation of macrocyclic NS3-serine protease
     inhibitors of hepatitis C virus
     comprising alkyl and aryl alanine p2 moieties
IN   Venkatraman, Srikanth; Chen, Kevin X.; Arasappan, Ashok; Njoroge, F.
     George; Girijavallabhan, Viyyoor M.; Chan, Tin-Yau; McKittrick, Brian A.;
     Prongay, Andrew J.; Madison, Vincent S.
PA   Schering Corporation, USA
SO   PCT Int. Appl., 218 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
IC   ICM  C07D273-00
CC   34-3 (Amino Acids, Peptides, and Proteins)
     Section cross-reference(s): 1, 7, 63
FAN.CNT 1
     PATENT NO.        KIND  DATE           APPLICATION NO.  DATE
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PI   WO 2001081325      A2   20011101       WO 2001-US12530  20010417
     WO 2001081325      A3   20020801
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
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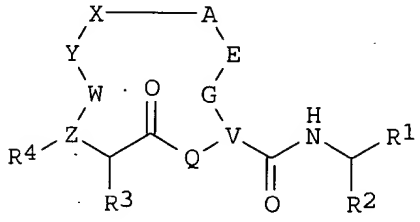
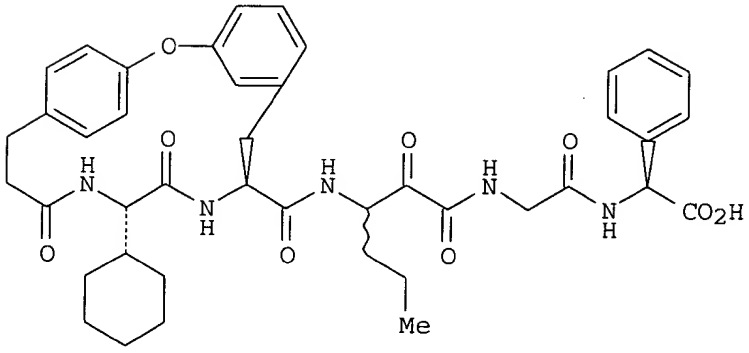
CO, CR, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, HR, HU, ID,
IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LU, LV, MA, MD, MG,
MK, MN, MX, MZ, NO, NZ, PL, PT, RO, RU, SE, SG, SI, SK, SL, TJ,
TM, TR, TT, TZ, UA, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU,
TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2002016294	A1	20020207	US 2001-836636	20010417
BR 2001010104	A	20030107	BR 2001-10104	20010417
EP 1274724	A2	20030115	EP 2001-927142	20010417
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
NO 2002005030	A	20021218	NO 2002-5030	20021018
PRAI US 2000-198204P	P	20000419		
WO 2001-US12530	W	20010417		

OS MARPAT 135:344735
GI



I



II

AB **Macrocyclic** compds. I [E, X, Y may be independently present or absent, and if present may be (un)substituted (cyclo)alkyl, aryl, heteroalkyl, heteroaryl, ether, amino, sulfide, sulfone, amide, sulfonamide, urea, carbamate, hydrazide, carbonyl, etc.; R1 = acyl or boryl groups; Z = O, N, or CH; W = null, CO, CS, SO2, C:NR (R = H, alkyl, cycloalkyl, aryl, etc.); Q = (NR)p (p = 0-6), O, S, CH2, CHR, CRR' (R' = any group given for R) or a double bond toward V; A = O, CH2, (CHR)p, (CHRCHR')p, (CRR')p, NR, S, SO2, CO or a bond; G = (CH2)p, (CHR)p,

(CRR')p, NR, O, S, SO2, SO2NH, CO or a bond towards E or V; R2, R3, R4 = H, (un)substituted (hetero)alkyl, -aryl or -cycloalkyl, alkoxy, aryloxy, alkylthio, arylthio, amino, amido, ester, carboxylic acid, carbamate, urea, ketone, aldehyde, cyano, nitro, etc.], including enantiomers and pharmaceutically acceptable salts, were prepd. as **hepatitis C virus** (HCV) protease inhibitors. Thus, peptide II was prepd. by a multistep procedure involving cyclization of intermediate cyclopentadiene-.eta.6-ruthenium-4-chlorophenylpropionic acid-cyclohexylglycine-m-tyrosine-OMe. II showed Ki = 0.001-1.0.mu.M in the HCV protease assay. The invention also discloses pharmaceutical compns. comprising I as well as methods of using them to treat disorders assocd. with the HCV protease.

ST **macrocyclic** peptide prepn NS3 **serine protease inhibitor**; hepatitis C treatment **macrocyclic** peptide

IT Hepatitis
(C; prepn. of **macrocyclic** NS3-**serine protease inhibitors** of **hepatitis C virus**)

IT Peptides, preparation
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(cyclic; prepn. of **macrocyclic** NS3-**serine protease inhibitors** of **hepatitis C virus**)

IT 371110-87-1P 371110-89-3P 371110-91-7P 371110-93-9P 371110-95-1P
371110-97-3P 371110-99-5P 371111-01-2P 371111-03-4P 371111-08-9P
371111-09-0P 371111-11-4P 371111-13-6P 371111-15-8P 371111-17-0P
371111-19-2P 371111-23-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of **macrocyclic** NS3-**serine protease inhibitors** of **hepatitis C virus**)

IT 371110-88-2P 371110-90-6P 371110-92-8P 371110-94-0P 371110-96-2P
371110-98-4P 371111-00-1P 371111-02-3P 371111-04-5P 371111-05-6P
371111-06-7P 371111-07-8P 371111-10-3P 371111-12-5P 371111-14-7P
371111-16-9P 371111-18-1P 371111-20-5P 371111-21-6P 371111-22-7P
371111-24-9P 371111-25-0P 371111-26-1P 371111-27-2P 371111-28-3P
371111-29-4P 371111-30-7P 371111-31-8P 371111-32-9P 371111-33-0P
371111-34-1P 371111-35-2P 371111-36-3P 371111-37-4P 371111-38-5P
371111-39-6P 371111-40-9P 371112-25-3P 371112-26-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of **macrocyclic** NS3-**serine protease inhibitors** of **hepatitis C virus**)

IT 149885-80-3
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(prepn. of **macrocyclic** NS3-**serine protease inhibitors** of **hepatitis C virus**)

IT 298-12-4, Glyoxylic acid 627-00-9, 4-Chlorobutyric acid 627-05-4, 1-Nitrobutane 821-41-0, 5-Hexen-1-ol 867-13-0, Triethyl phosphonoacetate 1119-60-4, 6-Heptenoic acid 1745-17-1 2019-34-3 3601-66-9 6282-88-8, Benzenepropanol, 4-chloro- 7389-87-9 30515-28-7, 7-Bromoheptanoic acid 34087-14-4 68090-88-0 80049-61-2

123053-23-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of **macrocyclic** NS3-**serine protease inhibitors** of **hepatitis C virus**)

IT 3710-42-7P 14565-11-8P 55478-55-2P 75677-02-0P 161725-12-8P
166196-05-0P 166196-06-1P 172035-28-8P 228404-10-2P 236393-88-7P
367258-42-2P 367258-43-3P 367258-44-4P 367258-45-5P 367258-46-6P
367258-47-7P 367258-48-8P 367258-49-9P 367259-26-5P 367259-52-7P
367260-51-3P 368454-24-4P 368454-26-6P 371111-41-0P 371111-42-1P
371111-43-2P 371111-44-3P 371111-45-4P 371111-46-5P 371111-47-6P
371111-48-7P 371111-49-8P 371111-50-1P 371111-51-2P 371111-52-3P
371111-53-4P 371111-54-5P 371111-55-6P 371111-56-7P 371111-57-8P
371111-58-9P 371111-59-0P 371111-60-3P 371111-61-4P 371111-62-5P
371111-63-6P 371111-64-7P 371111-65-8P 371111-66-9P 371111-67-0P
371111-68-1P 371111-69-2P 371111-70-5P 371111-71-6P 371111-72-7P
371111-73-8P 371111-74-9P 371111-75-0P 371111-76-1P 371111-77-2P
371111-78-3P 371111-79-4P 371111-80-7P 371111-81-8P 371111-82-9P
371111-83-0P 371111-84-1P 371111-85-2P 371111-86-3P 371111-87-4P
371111-88-5P 371111-89-6P 371111-90-9P 371111-91-0P 371111-92-1P
371111-93-2P 371111-94-3P 371111-95-4P 371111-96-5P 371111-97-6P
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371112-09-3P 371112-10-6P 371112-11-7P 371112-12-8P 371112-13-9P
371112-14-0P 371112-15-1P 371112-16-2P 371112-17-3P 371112-18-4P
371112-19-5P 371112-20-8P 371112-21-9P 371112-22-0P 371112-23-1P
371112-24-2P 371241-12-2P 371241-14-4P 371241-18-8P 371241-24-6P
371241-28-0P 371241-36-0P 371241-43-9P 371241-46-2P 371241-50-8P
371241-54-2P 371755-64-5P 371755-65-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of **macrocyclic** NS3-**serine protease inhibitors** of **hepatitis C virus**)

IT 371112-06-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of **macrocyclic** NS3-**serine protease inhibitors** of **hepatitis C virus**)

L16 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:763001 CAPLUS
DN 135:318715
TI Preparation of **macrocyclic** NS3-**serine protease inhibitors** of **hepatitis C virus** comprising n-cyclic p2 moieties
IN Chen, Kevin X.; Arasappan, Ashok; Venkatraman, Srikanth; Parekh, Tejal N.; Gu, Haining; Njoroge, F. George; Girijavallabhan, Viyyoor M.; Ganguly, Ashit; Saksena, Anil; Jao, Edwin; Yao, Nanhua H.; Prongay, Andrew J.; Madison, Vincent S.; Vibulbhan, Bancha
PA Schering Corporation, USA
SO PCT Int. Appl., 402 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07D498-00
CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 1, 63
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI WO 2001077113 A2 20011018 WO 2001-US10869 20010403
WO 2001077113 A3 20020620
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LU, LV, MA, MD, MG, MK, MN, MX, MZ, NO, NZ, PL, PT, RO, RU, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
US 2002107181 A1 20020808 US 2001-825399 20010403
EP 1268525 A2 20030102 EP 2001-926601 20010403
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
BR 2001009861 A 20030610 BR 2001-9861 20010403
NO 2002004797 A 20021204 NO 2002-4797 20021004
PRAI US 2000-194607P P 20000405
WO 2001-US10869 W 20010403
OS MARPAT 135:318715
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [wherein X and Y = independently (cyclo)alkyl, heteroalkyl, (aryl)heteroaryl, alkyl(hetero)aryl, substituted ether, sulfide, sulfone, amide, sulfonamide, urea, carbamate, hydrazide, carbonyl, etc.; R1 = CHO, acyl, or (un)substituted carboxy, carbamoyl, boryl, etc.; Z = O, N, or CH, W = null or CO, CS, or SO2; Q = null or CH, N, P, (CH2)p, (CHR)p, (CRR')p, O, NR, S, or SO2; A = O, CH2, (CHR)p, (CHRCHR')p, (CRR')p, NR, S, SO2, or a bond; E = CH, N, CR, or a double bond toward A, L, or G; G = null or (CH2)p, (CHR)p, or (CRR')p; J = null or CH, CR, O, S, or NR; M = null or O, NR, S, SO2, "(CH2)p, (CHR)p, (CHRCHR')p, or (CRR')p; p = 0-6; R, R', R2, R3, and R4 = independently H, (cyclo)alkyl, alkenyl, heterocycloalkyl, alkoxy, aryloxy, alkylthio, arylthio, amino, amido, ester, carboxylic acid, carbamate, urea, ketone, CHO, CN, NO2, O, N, S, P, etc.] were prepd. as **hepatitis C virus** (HCV) protease inhibitors. For example, II (multi-step prepn. given) was cyclized, deesterified, and coupled with III.bul.HCl (prepn. given) to give the **macrocyclic** hydroxyamide intermediate. Oxidn. using Des-Martin reagent followed by flash chromatog. afforded two diastereomers IV in 82% combined yield. The (S)-isomer inhibited NS3-serine protease HeLa/Huh7 co-transfected cells with a Ki of 2 .mu.M. The invention also discloses pharmaceutical compns. comprising I as well as methods of using them to treat disorders assocd. with the HCV protease.

ST **macrocyclic** peptide prepn NS3 **serine protease inhibitor**; peptide macrocycle prepn hepatitis C treatment

IT Hepatitis
(C, treatment; prepn. of **macrocyclic** NS3-**serine protease inhibitors** of **hepatitis C virus** comprising cyclic p2 moieties)

IT Peptides, preparation
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);

BIOL (Biological study); PREP (Preparation); USES (Uses)
(cyclic; prepn. of **macrocyclic** NS3-**serine protease inhibitors** of **hepatitis C virus** comprising cyclic p2 moieties)

IT Antiviral agents
(pharmaceutical compn. component; prepn. of **macrocyclic** NS3-**serine protease inhibitors** of **hepatitis C virus** comprising cyclic p2 moieties)

IT Interferons
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical compn. component; prepn. of **macrocyclic** NS3-**serine protease inhibitors** of **hepatitis C virus** comprising cyclic p2 moieties)

IT Interferons
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.alpha., pharmaceutical compn. component; prepn. of **macrocyclic** NS3-**serine protease inhibitors** of **hepatitis C virus** comprising cyclic p2 moieties)

IT 36791-04-5, Ribavirin
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical compn. component; prepn. of **macrocyclic** NS3-**serine protease inhibitors** of **hepatitis C virus** comprising cyclic p2 moieties)

IT 367257-63-4P 367257-64-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PUR (Purification or recovery); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of **macrocyclic** NS3-**serine protease inhibitors** of **hepatitis C virus** comprising cyclic p2 moieties)

IT 367257-21-4P 367257-22-5P 367257-25-8P 367257-26-9P 367257-33-8P
367257-34-9P 367257-36-1P 367257-37-2P 367257-38-3P 367257-39-4P
367257-46-3P 367257-47-4P 367257-53-2P 367257-54-3P 367257-73-6P
367257-80-5P 367257-81-6P 367257-82-7P 367257-83-8P 367257-85-0P
367257-86-1P 367264-97-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of **macrocyclic** NS3-**serine protease inhibitors** of **hepatitis C virus** comprising cyclic p2 moieties)

IT 367257-23-6P 367257-27-0P 367257-40-7P 367257-42-9P 367257-48-5P
367257-50-9P 367257-51-0P 367257-67-8P 367257-69-0P 367257-84-9P
367257-87-2P 367257-88-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of **macrocyclic** NS3-**serine protease inhibitors** of **hepatitis C virus** comprising cyclic p2 moieties)

IT 367257-24-7P 367257-28-1P 367257-29-2P 367257-30-5P 367257-31-6P
367257-32-7P 367257-35-0P 367257-41-8P 367257-43-0P 367257-44-1P

367257-45-2P 367257-49-6P 367257-52-1P 367257-55-4P 367257-56-5P
367257-57-6P 367257-58-7P 367257-59-8P 367257-60-1P 367257-61-2P
367257-62-3P 367257-65-6P 367257-66-7P 367257-68-9P 367257-70-3P
367257-71-4P 367257-76-9P 367257-77-0P 367257-78-1P 367257-79-2P
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367258-39-7P 367258-40-0P 367258-41-1P 368871-07-2P 368871-08-3P
368871-09-4P 368871-10-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of **macrocyclic** NS3-**serine protease** **inhibitors** of **hepatitis C virus** comprising cyclic p2 moieties)

IT 149885-80-3, NS3 serine protease
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(prepn. of **macrocyclic** NS3-**serine protease** **inhibitors** of **hepatitis C virus** comprising cyclic p2 moieties)

IT 367259-40-3P 367259-41-4P 367259-42-5P 367259-43-6P 367259-44-7P
367259-45-8P 367259-46-9P 367259-47-0P 367259-48-1P 367259-49-2P
367259-50-5P 367259-51-6P
RL: PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
(prepn. of **macrocyclic** NS3-**serine protease** **inhibitors** of **hepatitis C virus** comprising cyclic p2 moieties)

IT 98-58-8, 4-Bromobenzenesulfonyl chloride 98-61-3, Pipsyl chloride
99-06-9, 3-Hydroxybenzoic acid, reactions 107-87-9, 2-Pentanone
108-46-3, 1,3-Benzenediol, reactions 621-37-4 627-05-4, 1-Nitrobutane
1013-88-3, Diphenylketimine 1075-49-6, 4-Vinylbenzoic acid 1119-60-4,
6-Heptenoic acid 1484-26-0 2900-27-8 2905-24-0, 3-
Bromobenzenesulfonyl chloride 4248-19-5, tert-Butyl carbamate
4724-10-1 4799-68-2, 3-Benzyloxypropanol 13726-69-7 19721-22-3,
3-Mercaptopropanol 19790-60-4, 3-Benzyloxypropionaldehyde 27516-53-6,
Pentenoic acid 32462-30-9 33821-94-2 36805-97-7 39687-95-1, Methyl
isocyanoacetate 58558-53-5 64187-48-0 74844-93-2 77530-32-6
78183-55-8 102195-79-9 103262-83-5 109183-71-3 109183-72-4
121148-00-3 131721-90-9 161879-12-5 367260-42-2 367260-44-4
367260-47-7 367260-49-9 367260-51-3 367260-53-5 367260-55-7
367260-57-9 367260-62-6 367260-64-8 367260-67-1 367260-69-3
367260-71-7 367260-73-9 367260-76-2 367260-78-4 367260-80-8
367260-82-0 367260-87-5 367260-90-0 367260-94-4 367260-96-6
367260-99-9 367261-01-6 367261-07-2 367261-09-4 367261-12-9
367261-14-1 367261-20-9 367261-22-1 367261-24-3 367261-26-5
367261-28-7 367261-30-1 367261-32-3 367261-35-6 367261-38-9
367261-40-3 367261-44-7 367261-46-9 367261-48-1 367261-50-5
367261-51-6 367261-52-7 367261-54-9 367261-56-1 367261-58-3
367261-66-3 367261-69-6 367261-71-0 367261-73-2 367261-75-4

368454-24-4 368454-26-6 368871-37-8 368871-38-9 368871-39-0
368871-40-3 368871-41-4 368871-42-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of **macrocyclic** NS3-**serine protease**
inhibitors of **hepatitis C virus**
comprising cyclic p2 moieties)

IT 69651-48-5P 74844-91-0P 84520-67-2P 84740-98-7P 88931-77-5P
119927-71-8P 166196-05-0P 166196-06-1P 204398-85-6P 367258-42-2P
367258-43-3P 367258-44-4P 367258-45-5P 367258-46-6P 367258-47-7P
367258-48-8P 367258-49-9P 367258-50-2P 367258-51-3P 367258-52-4P
367258-53-5P 367258-54-6P 367258-55-7P 367258-56-8P 367258-57-9P
367258-58-0P 367258-59-1P 367258-60-4P 367258-61-5P 367258-62-6P
367258-63-7P 367258-64-8P 367258-65-9P 367258-66-0P 367258-67-1P
367258-69-3P 367258-70-6P 367258-72-8P 367258-73-9P 367258-75-1P
367258-77-3P 367258-79-5P 367258-82-0P 367258-83-1P 367258-85-3P
367258-86-4P 367258-87-5P 367258-88-6P 367258-89-7P 367258-92-2P
367258-95-5P 367258-97-7P 367258-98-8P 367258-99-9P 367259-01-6P
367259-02-7P 367259-03-8P 367259-04-9P 367259-05-0P 367259-06-1P
367259-07-2P 367259-08-3P 367259-09-4P 367259-10-7P 367259-11-8P
367259-12-9P 367259-13-0P 367259-14-1P 367259-15-2P 367259-16-3P
367259-17-4P 367259-18-5P 367259-19-6P 367259-20-9P 367259-21-0P
367259-22-1P 367259-23-2P 367259-24-3P 367259-25-4P 367259-26-5P
367259-27-6P 367259-28-7P 367259-29-8P 367259-30-1P 367259-31-2P
367259-32-3P 367259-33-4P 367259-34-5P 367259-35-6P 367259-36-7P
367259-37-8P 367259-38-9P 367259-39-0P 367259-59-4P 368454-16-4P
368454-18-6P 368454-20-0P 368454-22-2P 368871-11-8P 368871-12-9P
368871-13-0P 368871-14-1P 368871-15-2P 368871-16-3P 368871-17-4P
368871-18-5P 368871-19-6P 368871-20-9P 368871-21-0P 368871-23-2P
368871-24-3P 368871-25-4P 368871-26-5P 368871-27-6P 368871-28-7P
368871-29-8P 368871-30-1P 368871-31-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of **macrocyclic** NS3-**serine protease**
inhibitors of **hepatitis C virus**
comprising cyclic p2 moieties)

IT 87691-27-8P 121147-97-5P 121148-05-8P 149507-31-3P 367259-52-7P
367259-54-9P 367259-56-1P 367259-57-2P 367259-58-3P 367259-60-7P
367259-61-8P 367259-62-9P 367259-63-0P 367259-64-1P 367259-65-2P
367259-66-3P 367259-67-4P 367259-68-5P 367259-70-9P 367259-72-1P
367259-74-3P 367259-76-5P 367259-79-8P 367259-81-2P 367259-85-6P
367259-87-8P 367259-89-0P 367259-91-4P 367259-93-6P 367259-95-8P
367259-97-0P 367259-99-2P 367260-01-3P 367260-04-6P 367260-06-8P
367260-08-0P 367260-10-4P 367260-12-6P 367260-14-8P 367260-15-9P
367260-17-1P 367260-19-3P 367260-22-8P 367260-24-0P 367260-27-3P
367260-29-5P 367260-31-9P 367260-33-1P 367260-35-3P 367260-36-4P
367260-38-6P 367261-83-4P 367264-98-0P 368871-32-3P 368871-33-4P
368871-34-5P 368871-35-6P 368871-36-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of **macrocyclic** NS3-**serine protease**
inhibitors of **hepatitis C virus**
comprising cyclic p2 moieties)